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TWO-PIECE BICYCLE CRANK SET

Abstract

The present invention is a two-piece bicycle crank set comprising of

5 two monolithic, thin-wall continuous tubular members. Each tubular member includes a crank arm and a one-half portion of a crank axle, where the crank arm and the portion of the crank axle form a continuous thin-wall tubular shape. The two tubular members are coupled precisely midway between two bearing sets within

10 a bracket shell of a bicycle. The coupling connecting the two tubular members can include an outer sleeve, an inner sleeve, two exteriorly tapered and internally threaded bushings and a threaded stud. Turning the threaded stud positions the bushings to expand the inner sleeve, whereby the crank axle portions of the two tubular members are secured within the inner sleeve and the outer sleeve by the expanding inner sleeve. Alternatively, an interference fit coupling connects the two

15 tubular members, and includes a mortise member and a tenon member. The tenon member fits into and interlocks within the mortise member to secure the first tubular member to the second tubular member. The interference fit coupling can further include an attachment bolt and a separation bolt to facilitate assembly and disassembly of the coupling.

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